



**The Chinese University of Hong Kong**  
**Non-confidential Abstract of Technology Disclosure**

---

**Title:**

**Epididymis- Specific Defensins for Evaluating and Regulating Male Fertility**

**CUHK Ref. No.:**

04/MED/168

**Inventor:**

Professor H C CHAN, Department of Physiology, et. al

**Patent Status:**

US Patent Pending

**Non-confidential abstract:**

The present invention relates to the discovery that epididymis-specific defensins play an important role in regulating sperm motility and therefore male fertility. Provided are methods for evaluating male fertility based on the level of epididymis-specific defensin(s) bound to sperm, kits for evaluating male fertility, and methods for enhancing or suppressing fertility in a male by regulating the level of epididymis-specific defensin(s) and the binding between sperm and the defensin(s).

**Application:**

The invention relates to male infertility, and in particular to assays for predicting fertility in animals including humans. The invention further relates to the methods of neutralization or downregulation of defensins for male contraception and the methods to enhance defensins production or to directly apply defensin polypeptides to spermatozoa for treatment of infertility.

**Commercial Potential:**

10-15% of couples worldwide are infertile and most of them go through various forms of diagnosis and treatment. No male contraception method is commercially available worldwide.

---

**For further queries, please contact:**

Mr Billy Lam  
Technology Licensing Coordinator  
*Tel:* (852) 2609 8882  
*Fax:* (852) 2603 5451  
*Email:* [billylam@cuhk.edu.hk](mailto:billylam@cuhk.edu.hk)

*Address:*  
Technology Licensing Office  
The Chinese University of Hong Kong  
Room 226, Pi Ch'iu Bldg, Shatin, New Territories  
Hong Kong SAR